

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:7344
ANSWERED ON:15.05.2002
USES OF ATOMIC POWER
PUNNULAL MOHALE

Will the Minister of ATOMIC ENERGY be pleased to state:

(a) whether any programmes are being run to use atomic energy for power generation, treatment of diseases like cancer, preservation of food stuff and to develop agricultural technology; and

(b) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF SMALL SCALE INDUSTRIES AND MINISTERS OF STATE IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS, MINISTER OF STATE IN THE MINISTRY OF PLANNING AND MINISTERS OF STATE IN THE DEPARTMENTS OF ATOMIC ENERGY AND SPACE (SHRIMATI VASUNDHARA RAJE)

(a) Yes, Sir.

(b) The applications of atomic energy in India have been playing a very important role in national development, in power and non-power sectors leading to widespread benefits to the society. The non-power applications are in the fields of industry, medicine and agriculture. There are fourteen operating nuclear power reactors generating 2720 MWe. Eight nuclear power plants are under construction to augment the power generation capacity to 6680 MWe by the end of this decade.

Various atomic energy applications in the field of health care, cancer treatment, medicine, food and agriculture are as follows:

Development of a range of new nuclear medicines for diagnostic and therapeutic purposes.

Radiation sterilization of various medical products such as syringes, surgical sutures, cotton dressings, drugs and related products.

Development, manufacture and supply of low cost blood irradiators containing cobalt-60 source to various hospitals in the country.

Training of medical physicists and radiation technologists to man the facilities in the area of nuclear medicine in various hospitals of the country.

A 'Poton Irradiator' plant at Lasalgaon near Nashik in the state of Maharashtra to demonstrate increased shelf life of onions on commercial scale is under construction.

Radiation Processing Plant (capacity 30T/Day) for treatment and preservation of spices at Vashi, Navi Mumbai using Cobalt-60 is being operated by Board of Radiation Isotope Technology (BRIT) since January 2000.

In the field of agriculture, 22 improved high yielding crop varieties such as black gram, green gram, groundnut, mustard, tur, rice and jute have been developed in the recent past using radiation induced mutation breeding approach. Some of the mutants produced by Bhabha Atomic Research Centre (BARC) are very popular amongst farmers. As per the statistics, Trombay groundnut variety accounts for about 30% of the total national breeder seed indent. Trombay blackgram variety accounts for 44% of the total national breeder seed indent. blackgram variety has covered 95% of the area under blackgram cultivation. Further work to develop disease resistant high yielding crop varieties is a continuous process at BARC.